LETTERS

HUMAN BIOMONITORING TO OPTIMIZE FISH CONSUMPTION ADVICE

In "Human Biomonitoring to Optimize Fish Consumption Advice," Arnold et al. suggested that the advisories issued by the US Environmental Protection Agency (EPA) and the US Food and Drug Administration (FDA) may have decreased fish ingestion among Alaskan women and encouraged them to eat a less healthy diet.[1] They argued that the advisories violate the principles of beneficence—to do no harm, maximize benefits, and minimize risks. We disagree. The Alaska Division of Public Health encourages all Alaskans, including pregnant women and young children, to continue unrestricted consumption of fish from Alaskan waters.[2] This advice is based on a net-benefit rather than a maximal-net-benefit argument.

The net benefit of a diet that is rich in freshwater fish, marine fish, or both is not always apparent. Several recent studies have suggested that the toxicity of methylmercury can outweigh the cardiovascular and developmental benefits of nutrients found in fish.[3–5]

The public is confused and concerned about the quality of the fish it eats. People worry about chemicals that can accumulate in their bodies. Telling worried people not to worry is seldom an effective risk communication strategy. Unless clear fish consumption guidelines are issued by credible federal and local agencies, the public is likely to respond by avoiding all fish.

Thirteen countries, many Native American tribes, and 48 of the 50 US states encourage the public to enjoy fish as part of a healthy, balanced diet. These entities' advisories discuss the benefits of eating a variety of fish that are low in contamination and list comparative levels of mercury and PCBs by fish species, size or age, and location. Between 1993 and 2003, overall fish consumption in the Great Lakes Basin remained stable while consumption of the most contaminated Great Lakes fish decreased.

The majority of women we have surveyed are in compliance with the state and federal advisories. Only a small percentage of them need to modify the type or amount of fish in their diets to lower their risk. Our biomonitoring findings are remarkably consistent with the data shown in Figure 2 of Arnold et al. According to this figure, 7% of pregnant women in the Alaskan cohort had a hair mercury level above the EPA's guideline value of 1 ppm. By following federal and local advisories, these women can minimize their exposure to methylmercury and maximize the health benefits of the fish they eat. Empowering them to do so is consistent with the authors' principle of beneficence. ■

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